

**What we claim is:**

- 5    1:    A polymeric composition of matter which contains at least 10% of at least one polyalkyl amine and one poly alcohol prepared by cross-linking with an agent which is an aldehyde or acid.
- 10    2:    The composition of claim 1 which is in the form of a membrane.
- 10    3:    The membrane of claim 2 wherein the polyalkyl amine is chosen from among polyallyl amine, polyvinyl amine, poly-4-vinyl pyridine and poly-2-vinyl pyridine.
- 15    4:    The membrane of claim 2 wherein the polyalcohol is chosen from among polyvinyl alcohol, polyethylene glycol and polyallyl alcohol.
- 15    5:    The membrane of claim 2 wherein the polyalkyl amine is an ionic derivative of the amine.
- 20    6:    The membrane of claim 5 wherein the ionic group is a chloride, sulfate or nitrate.
- 20    7:    The membrane of claim 2 which is a selectively permeable membrane.
- 25    8:    The membrane of claim 2 which is on a porous support.
- 25    9:    The membrane of claim 2 containing, additionally, silicon dioxide particles.
- 30    10:    A process for removing water from a process stream using the membrane of claim 2 comprising contacting said stream with said membrane, said stream containing an organic component.

- 11: The process of claim 10 wherein the process stream is a vapor.
  - 12: The process of claim 10 wherein the process stream is a liquid.
- 5 13: The composition of claim 1 which is in the form of sorbent particles.
- 14: A process of removing water from a stream containing an organic/water mixture by exposure of said mixture to the sorbent particles of claim 13.
- 10 15: A process of removing water from a stream containing an organic/water mixture comprising the steps of:
  - a: loading a column with the particles of claim 13, and
  - b: passing said stream containing an organic/water mixture through said column.
- 15 16: The process of claim 15 wherein said stream is a liquid.
- 17: The process of claim 15 wherein said stream is a vapor.
- 20 18: The composition of claim 1 wherein the polyalkyl amine component is present at a concentration of at least 40% by weight.
- 19: The method of claim 18 wherein the polyalkyl amine is present at a 50% to 90%
- 25 concentration by weight.
- 20: The composition of claim 18 containing sorbent particles.